



PATIENT

Benny Miller

SPECIES

Canine

BREED

American Bully

SEX

MN

AGE

8y

WEIGHT

27 lbs.

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP
(Canine and Feline)

IMAGING PERFORMED BY

Jenna Walsh, CVT

HOSPITAL NAME

Four Corners VC

REFERRING VET

Dr. Williams

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16074

DATE

2/9/23

PRESENTING CLINICAL SIGNS

P presented for dribbling urine chronically and having a seizure overnight the previous day. P was previously diagnosed with eosinophilic granuloma and lymphedema. P was previously under therapy but hasn't had steroids in multiple months and has been flare up free. On exam P is QAR, sunken eyes, mild muscle atrophy over temporalis and over topline. Roughened skin and fur over dorsum from previous scar tissue. Current Medications real mushroom, cranberry goat milk, animals essentials, herbal green alternatives, super immune tincture, bladder strength, connection joint powder, green lipped mussel, cbd

Primary Question/Differential to Be Answered in This Exam looking for indications of crushing's disease or other liver abnormalities, alternative cause for leaking urine

Abnormal PE/Chem/CBC/UA Results: Glucose 55 creat 0.3 BUN 5 ALT 700 was 201 in August ALKP >2000 was 302 in August Lipase 1938 PLT 672 USG 1.004 urine pro 100

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder was non-distended exhibiting normal tone with no evidence of inflammatory or neoplastic urinary bladder mural criteria. Anechoic urine was present with no sediment or calculi. The urethra exhibited overtly normal structure and tone to a depth of 4.0 cm.

The residual prostate was normal in size and contour with subtle heterogeneous nonmineralized residual prostatic parenchyma measuring 1.6 cm in diameter.

The area of the aortic trifurcation was free of pathology.

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and mild loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation or pyelectasia was present. The left kidney measured 7.4 cm in length. The right kidney measured 7.6 cm in length.

Adrenal Glands

The bilateral adrenal glands were mildly prominent in size, based on caudal pole width measurement. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia. The left adrenal gland measured 3.4 cm length x 0.97 cm width at the caudal pole. The right adrenal gland measured 3.0 cm length x 0.95 cm width at the caudal pole. No adrenal tumors were present.

Spleen

The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or



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thrombosis. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted.

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Liver/ Gallbladder

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The liver exhibited marked, irregular enlargement with capsule asymmetry. The liver appeared to extend caudally potentially past the level of the gastric axis and into the mid-abdomen.

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Nonhomogeneous, mild irregular hepatic parenchyma exhibiting indistinct nodules as well as ill-defined, variably expansive, homogeneous to nonhomogeneous intraparenchymal masses. An example of an ill-defined hepatic mass measured approximately 11.0-12.0 cm in diameter. Subjective displaced gallbladder ventrally and possibly caudally was noted with normal gallbladder size. The gallbladder contained anechoic content with mild to moderate, nonorganized, echogenic gallbladder sludge. No evidence of peripheral gallbladder inflammation was noted. The cystic and common bile ducts were normal.

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Gastrointestinal

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The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction, or foreign material.

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The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction, or foreign material.

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Normal visible colon wall layers were present with apparent formed feces in lumen.

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Pancreas

The parenchyma of the left limb, body, and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease were evident.

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Free Abdomen

Jenna Walsh, CVT

No overt omental lymphadenopathy or peritoneal effusion was noted.

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ULTRASONOGRAPHIC FINDINGS

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- Marked irregular hepatomegaly exhibiting nonhomogeneous to ill-defined possibly coalescing masses

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- Nondistended yet subjective displaced gallbladder containing mild to moderate luminal debris (non-mucocele)

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- Mild age-related kidneys

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- Overtly normal urinary bladder, residual prostate, and visible proximal urethra

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- Mildly prominent to nonhomogeneous bilateral adrenal glands - nonspecific, no adrenal tumors

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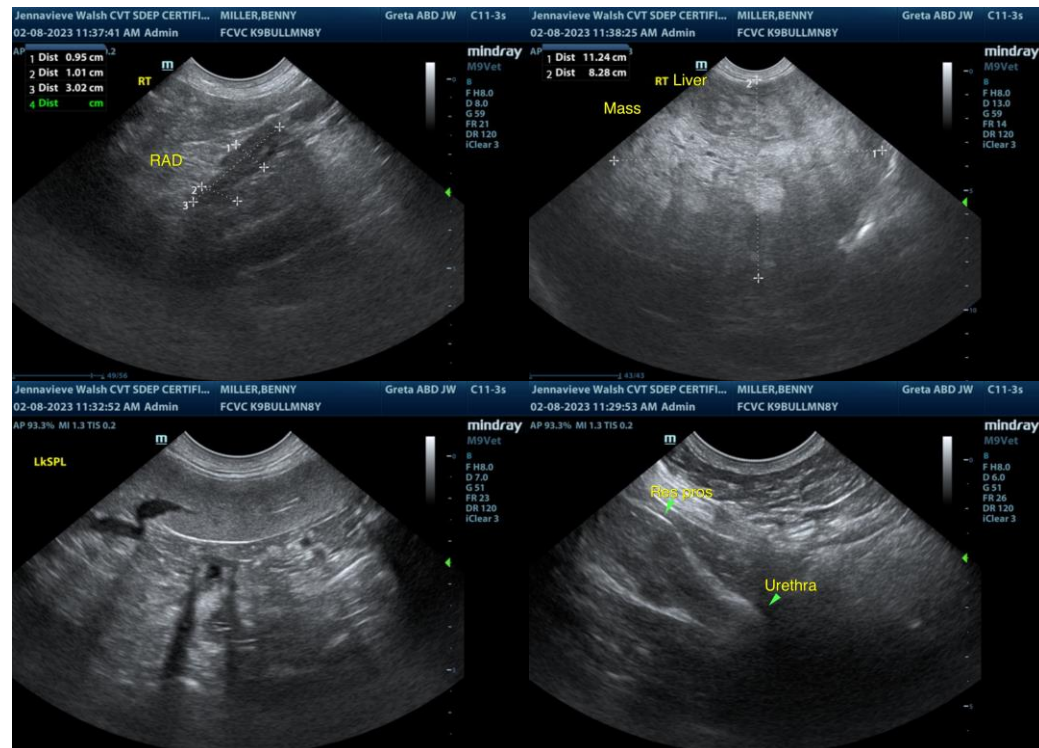
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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The irregular hepatomegaly with ill-defined masses was nonspecific with considerations including chronic yet marked to variable vacuolar hepatopathy, inflammatory / immune-mediated disease, nonobstructive cholestasis, hyperplasia, hematopoiesis, infiltrative neoplasia or other. Neoplastic criteria may be favored yet not definitive. Further assessment may include, assuming normal clotting status, FNA cytology of ill-defined hepatic mass or parenchyma for cytology and possible further clarification.

Adrenal workup could be considered if strong clinical suspicion of Cushing's Syndrome, yet may be considered less likely if no evidence of PU/PD, polyphagia, etc. Further renal staging to include urine C/S and protein: creatinine ratio on sterile urine sample may be considered. Hepatosupportive medications including Denamarin and Ursodiol may prove beneficial.

Given the seizure episode in this patient, monitoring of serum BG levels is recommended as hypoglycemia may be associated with hepatic pathology / masses.





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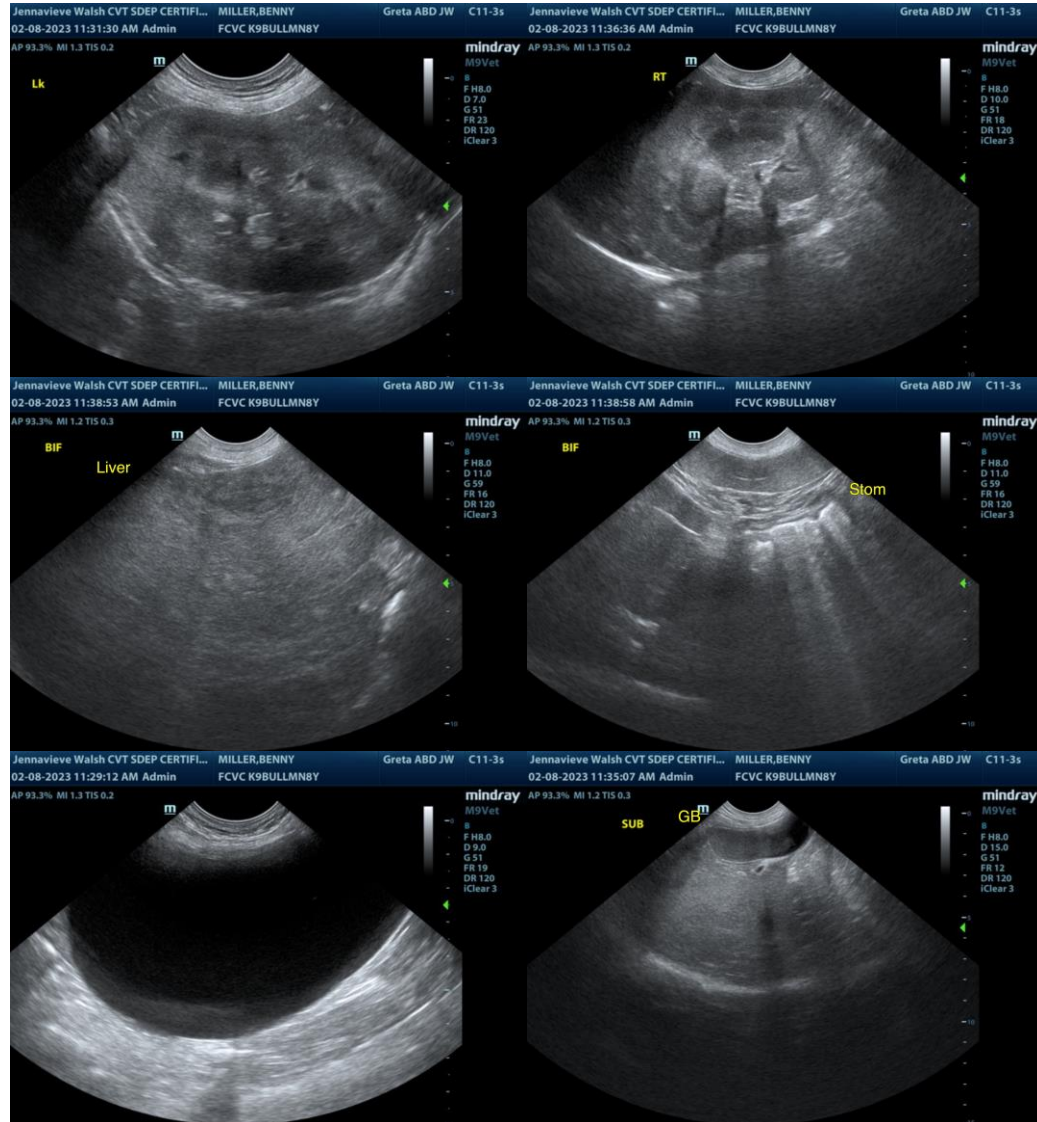
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance please contact me.

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